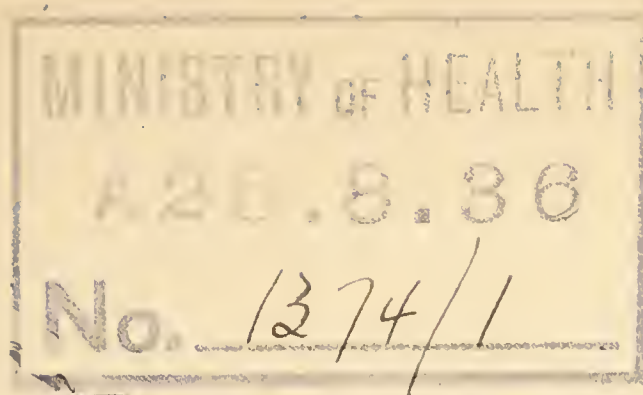




DIV. II.

ANNUAL REPORTS

For the Year 1935

ON THE

Malvern Urban District

BY

C. R. P. MITCHELL, M.D.,
Medical Officer of Health ;

AND

HUGH L. WHITWHAM, M.S.I.A.,
Sanitary Inspector.

23

MALVERN :

M. T. STEVENS, LTD., CHURCH STREET.

Sal' & i. vllc.
852
9
26.



ANNUAL REPORTS

For the Year 1935

Copied

ON THE

Malvern Urban District

BY

C. R. P. MITCHELL, M.D.,
Medical Officer of Health ;

AND

HUGH L. WHITWHAM, M.S.I.A.,
Sanitary Inspector.

25

MALVERN :

M. T. STEVENS, LTD., CHURCH STREET.

SOUTHFIELD HOUSE,
MALVERN,
June, 1936.

**To the Chairman and Members of the Malvern
Urban District Council.**

Ladies and Gentlemen,

I have the honour to present my Report for the year 1935; this is my twenty-eighth Annual Report as your Medical Officer of Health.

Again the Ministry of Health has directed that this shall be an "Ordinary Report" and not a "Survey Report."

Copies will be sent, as usual, to the Ministry of Health, the Home Secretary, and the County Council.

A.—Statistics and Social Conditions of the Area.

Area (in Acres)	7,288
Registrar-General's estimate of Resident Population, 1935	17,590
Number of inhabited houses (end of 1935)	4,860
Rateable Value	£143,926
Sum represented by a Penny Rate	£548

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

(a) Medical—Medical Officer of Health:

C. R. P. Mitchell, M.D. (part time).

Superintendent of the Isolation Hospital:

J. B. Jessiman, M.B. (part time).

(b) Others—Sanitary Inspector and Inspector under Housing Acts:

Hugh L. Whitwham, M.S.I.A., Cert. of R. San. Inst., and Sanitary Inspectors' Examination Joint Board as Sanitary Inspector; Cert. of R. San. Inst. as Inspector of Meats and Foods.

Veterinary Surgeon:

B. Secker, M.R.C.V.S.

During the year R. A. Upstone (additional Sanitary Inspector), who had carried out his duties for $4\frac{1}{2}$ years in a satisfactory manner, was successful in his application for the post of Sanitary Inspector to the Ringwood and Fordingbridge Rural District Council.

SOCIAL CONDITIONS.

Malvern is mainly an educational centre and residential town. There are no large industries which might affect the health of the inhabitants.

The Ministry of Labour's local bureau has kindly furnished me with figures which shew an increase of approximately 9% in unemployment during 1935 over the previous two years. This cannot be attributed to any particular cause other than a normal fluctuation in the labour market.

VITAL STATISTICS.

It is to be noted that the Registrar General's estimated population of the District is the same as for 1934.

BIRTH RATE.

168 births were registered in the District, compared with 156 in 1934, and 5 were born elsewhere. The total live births were 173, and of these 7 were illegitimate. The total still-births was 5, 1 of these being illegitimate. The Birth Rate was 9.08 per 1,000 of the population and the Still Birth Rate .049 per 1,000 of the population.

The figures for England and Wales were 14.7 and .62 respectively.

DEATH RATE.

184 deaths were registered in the District, but 225 were allocated to the District as the result of inward and outward transfers. This figure gives an annual Death Rate of 12.7 per 1,000 of the population, as compared with 13.1 last year and 14.3 for 1933.

There were 8 deaths of persons of 90 years and over, the oldest being 98, and the cause of death given was "Myocardial insufficiency, Old Age, Cholecystitis."

For England and Wales the Rate was 11.7 per 1,000 of the population.

It is interesting to note how things have improved as regards Death Rate in the country generally, though not in Malvern, since I made my first Report in 1908; on reference to this the figures given are 9.9 for Malvern and 14.7 for England and Wales.

Glancing down the pages of that 1908 Report the Infantile Mortality figure is even more impressive. The Infantile Mortality for England and Wales in 1908 was 121 per 1,000 births, whereas in 1935 it was 57.

DEATHS FROM PUERPERAL CAUSES.

There were no deaths from Puerperal Sepsis or other Puerperal Causes.

The principal causes of death, with the corresponding figures for 1934, are given in the following table:—

	1935.	1934.
Measles	0	1
Scarlet Fever	0	1
Diphtheria	1	3
Influenza	0	1
Tuberculosis of the Respiratory System...	10	11
Other Tuberculous Diseases	0	2

	1935.	1934.
General Paralysis of the Insane	0	2
Cancer, Malignant Disease	38	34
Diabetes	1	4
Cerebral Hæmorrhage, etc.	8	14
Heart Disease	67	59
Aneurysm	1	1
Other Circulatory Diseases	19	10
Bronchitis	2	7
Pneumonia (all forms)	8	12
Other Respiratory Diseases	4	2
Peptic Ulcer	0	2
Appendicitis	1	1
Diseases of Liver (other than Cirrhosis)...	1	1
Diarrhœa, etc (under 2 years)	1	2
Other Digestive Diseases	2	3
Acute and Chronic Nephritis	12	17
Congenital Debility, Premature Birth, Malformations, etc.	10	5
Senility	5	14
Suicide	8	3
Other Violent Deaths	4	8
Other Defined Diseases	21	23
Causes Ill-defined or unknown	1	0

INFANTILE MORTALITY.

11 infants under 1 year belonging to the District died during the year. This represents an Infantile Mortality of 64.1 per 1,000 births registered. As mentioned above the Infantile Mortality figure for England and Wales was 57.

Again, as I have mentioned in many previous Reports, Malvern is too small a District to have much significance attached to the number of deaths per 1,000 births. The death of premature twins may mean an increase of 10 or 15 per 1,000.

There were 166 legitimate births and of these 4 died, an Infantile Mortality of 24.09. There were 7 illegitimate births with 1 death, giving a Mortality of 142.8 per 1,000 live births.

There were no deaths from measles or Whooping Cough.

There was 1 death from Diarrhœa under 2 years old.

There was no special noteworthy causes of sickness or invalidity during the year.

There were no epidemics of Influenza or other serious zymotic diseases.

The mild weather in the first quarter of the year was responsible for the comparatively small number of deaths from Respiratory Diseases, but the rigours of "Spring," culminating in the disastrous frost of May 17th, were the cause of many fatalities: so also was the early onset of Winter (September).

B.—General Provisions of Health Services for the Area.

(a) Laboratory facilities remain as before. The County Council Laboratory at Worcester undertakes examinations for Diphtheria, Typhoid Fever, etc., without charge.

(b) Ambulance facilities: these are adequate and remain as mentioned in previous reports.

(c) Nursing in the Home. The five District Nursing Associations in the District continue to employ their individual nurse.

(d) Clinics and Treatment Centres. No change.

(e) Hospitals:—

(1) Malvern General Hospital.

(2) Malvern Isolation Hospital, administered by the Malvern Urban District Council. There has been no change in the accommodation since my last Report.

C.—Sanitary Circumstances of the Area.

(1) WATER.

The extension of the piped water supply to the new parts of the District has been completed.

On account of the drought during the greater part of the year the water supplied had to be from the Bromsberrow station. Samples were sent regularly to the County Council Laboratory at Worcester, and I append the Reports of two analyses furnished me by your Water Engineer, Mr. W. Osborne Thorp.

Report on Water samples sent to the County Analyst periodically for examination:—

MALVERN WATER.

	Red Sandstone Supply. Parts per 100,000.	Hill Supply.
Solids in Suspension	none	none
Solids in Solution at 100° C.	24.0	10.0
Solids in Solution, appearance	white	white
Solids in Solution after ignition	20.0	8.0
Behaviour of Solids on ignition	no change	no change
Phosphates	nil	nil
Chlorine as Common Salt ...	1.9	2.0
Free and Saline Ammonia ...	0.0005	0.0016
Albuminoid Ammonia ...	0.0035	0.0024
Oxygen absorbed in 4 hours ...	0.02	nil
Nitrogen as Nitrates	trace	nil
Colour	clear	clear
Deposit	none	none
Smell	none	none
Hardness—Permanent ...	4.6 Clark	2.4 Clark
Temporary ...	7.4 Clark	0.5 Clark
Total	12.0	2.9

	Bacterial Examination.	Bacterial Examination.
Gelatine cult. ...	28 per 1 c.c.	14 per 1 c.c.
Agar at 37° ...	2 per 1 c.c.	1 per 1 c.c.
Coli ...	0 per 285 c.c.	0 per 285 c.c.

The water is of good quality and fit for drinking purposes.

(2) DRAINAGE AND SEWERAGE.

Water carriage of sewerage is practically universal in the main part of the District. In the new part of the District work has been in progress to sewer the Guarlford Area. For details see Mr. Whitwham's report.

(3) RIVERS AND STREAMS.

There are none in the District.

(4) (1) CLOSET ACCOMMODATION.

Water Closet accommodation is the rule.

(2) PUBLIC CLEANSING.

Conditions remain as before, and I consider they are adequate. During the year two "Karrier" trucks were purchased.

(3) SANITARY INSPECTION OF THE AREA.

Details of the work will be found in the Report of your Inspector, which is to be found on page 15.

(4) SHOPS.

The administration of this Act is dealt with in the Sanitary Inspector's Report.

(5) SMOKE ABATEMENT.

Mr. Whitwham wrote one or two warning letters with regard to black smoke from the very small number of chimneys in the District, but no further action was taken.

(6) SWIMMING BATH.

The Swimming Bath in the Priory Park has been open since 22nd April, 1936. Mr. W. Osborne Thorp, Water Engineer, has kindly furnished me with the following particulars :—

Bacterial Analysis of Water taken from deep end on each occasion.

Agar at 37°C.	3 per 1 c.c.
Agar at 22°C.	6 per 1 c.c.
Coli group	Nil
B. Typhosus	Nil
B. Welchii	Nil
Streptococci	None detected
Free Chlorine	0.16 parts per million
P.H.	7.2

From my inspections the water looks very tempting, but when funds permit I should like to see shower baths provided, and no one to be allowed to go into the Bath who has not had a shower and foot bath: if only to avoid chance of infection to that very contagious disease of the feet, veruga.

Spectators also, in my opinion, should be kept away from the edge of the Bath.

SCHOOLS.

All the public elementary schools are supplied with water from the District mains, and all have water closet accommodation connected to the sewers.

The health of the school children was definitely good.

The incidence of infectious disease was slight, and the open weather during the first quarter reduced the usual Winter's toll of colds and coughs.

The only school which required closure was the Infants' Department of the Malvern Link Council School, from May 13th to May 31st, on account of Whooping Cough.

This is a record, I think, during my time of office.

D.—Housing.

Mr. Whitwham, your Officer under the Housing Acts, has given me the following figures:—

I.—INSPECTION OF DWELLING-HOUSES DURING THE YEAR.

(1)	(a)	Total of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	...	168
	(b)	Number of inspections made for the purpose						705
(2)	(a)	Number of dwelling-houses (included under sub-head (1) above), which were inspected and recorded under the Housing Consolidated Regulations, 1925	...					57
	(b)	Number of inspections made for the purpose						398
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...					31
(4)		Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	...					137

II.—REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers ...	51
---	----

III.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

(a) Proceedings under sections 17, 18 and 23 of the Housing Act, 1930.	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ...	0
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By Owners ...	0
(b) By Local Authorities in default of owners ...	0
(b) Proceedings under Public Health Acts.	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ...	0
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By Owners ...	0
(b) By Local Authority in default of Owners ...	0
(c) Proceedings under sections 19 and 21 of the Housing Act, 1930.	
(1) Number of dwelling-houses in respect of which Demolition Orders were made ...	10
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ...	6
(d) Proceedings under Section 20 of the Housing Act, 1930.	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ...	0
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ...	0

E.—Inspection and Supervision of Food.

(a) MILK SUPPLY.

The farms and dairies have been inspected from time to time during the year. There have been 5 complete reconstructions made under the direction of your Sanitary Inspector, and improvements have been called for in 3 instances.

During the year 4 dairymen applied for licenses under the Milk Special Designations Order.

68 samples for examination for bacterial content and for tubercle bacilli were taken. One sample was not satisfactory.

(b) MEAT AND OTHER FOODS.

There are nine Slaughterhouses in the District; these have been visited from time to time throughout the year by myself and your Sanitary Inspector. As mentioned previously some are wooden structures and are difficult to keep clean.

As I have pointed out in former Reports, under present circumstances thorough meat inspection is an impossibility.

Practically all the shops have a refrigerator or other form of safe or cold storage.

The Bakehouses in the District have been visited and have given rise for no complaint.

(c) ADULTERATION.

The Police are the Authority under these Acts.

(d) CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.

The County Laboratory at Worcester is available for this work.

(e) NUTRITION—DISSEMINATION OF KNOWLEDGE.

No special work has been done on this subject.

F.—Prevalence of and control over, Infectious and other Diseases.

The prevalence of notifiable infectious diseases was definitely below the average.

Two cases of Scarlet Fever only were notified. From Annual Reports dating from 1900 in my possession this is very definitely a record for the smallest number notified.

It is remarkable that the number of cases of Diphtheria notified (27) was very much higher than usual, at a time when special measures were being taken to combat this disease.

It will be noted that there was one death from Diphtheria, and I am informed that 4 or 5 of the cases were of Diphtheria Gravis.

I am of the opinion that the Hospital accommodation is utilised to the best advantage, within its limits. No doubt it would be advantageous if cases of measles and whooping cough could be admitted during an epidemic of these diseases, but it does not seem feasible in a small Hospital like this.

As mentioned in previous Reports, serum is given in all cases of Scarlet Fever, and has reduced the average stay in Hospital from 6 weeks to 4 weeks.

Influenza was absent from the District in any epidemic form throughout the year.

As mentioned before with regard to school closure, there was no epidemic of non-notifiable infectious diseases, and there were no deaths from Measles or Whooping Cough.

The School Teachers are very helpful in sending information, promptly, of cases of infectious diseases among their scholars.

The immunisation against Diphtheria, begun in 1934, was proceeded with by the Assistant School Medical Officers of the County.

73% of school children were immunised, and a certain number of pre-school aged children and others. Three injections were given in each case.

The keeping of records of the cases immunised entailed a great deal of extra work on the clerical staff of the Public Health Office; no fewer than 4,000 cards having to be filled up, and registers compiled.

It was unfortunate that one or two children contracted Diphtheria soon after their last injection and so before immunity was established, but it is noteworthy that so far this year (June) only 1 case of Diphtheria has been notified.

No special attention was required with regard to anthrax, epidemic jaundice, rheumatic fever, undulant fever, glandular fever, or psittacosis.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1935.

SMALL-POX.

No case of small-pox was notified.

SCARLET FEVER.

2 cases only were notified throughout the year. One in February and one in March. Both were removed to Hospital.

DIPHTHERIA.

27 cases were notified, as compared with 10 in 1934 and 9 in 1933. One case of Diphtheria Gravis proved fatal.

The monthly incidence was as follows : January, 2; February, 6; March, 2; April, 2; May, 5; June, 2; July, 3; September, 2; October, 1; November, 1; December, 1.

Three of the cases occurred in a private institution in the District.

In one instance 4 members of a family were infected; in two cases 3 members were infected; and again in two instances 2 members were infected.

23 of the cases were removed to your Hospital.

ENTERIC FEVER.

One case of Para Typhoid B was notified. It was removed to Hospital.

PUERPERAL FEVER.

No case of this disease was notified.

PUERPERAL PYREXIA.

1 case was notified and was removed to Worcester Infirmary.

PNEUMONIA.

8 cases were notified, as compared with 16 last year. All but one were notified during the first quarter of the year.

There were 8 deaths from this disease.

ERYSIPELAS.

Three cases of this disease were notified.

OPHTHALMIA NEONATORUM.

One case was notified, and recovered without injury to sight.

CANCER.

No observations can be furnished re undue prevalence in particular organs, nor do I think these exist in the District.

PREVENTION OF BLINDNESS.

No action was taken under Section 66 of the Public Health Act, 1925.

TUBERCULOSIS.

No action has been taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 62 of the Public Health Act, 1925.

17 cases of Pulmonary Tuberculosis and 4 of Non-Pulmonary Tuberculosis were notified during the year.

10 cases received Sanatorium treatment during the year.

The new cases and deaths are set out in age groups below :—

Age Periods	New Cases.				Deaths.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-
5	1	-	-	1	-	-	-	-
15	2	2	2	-	-	1	1	-
25	-	4	-	-	-	1	-	1
35	2	2	-	-	1	-	-	-
45	1	-	-	-	-	-	-	-
55	2	-	-	-	2	1	-	-
65 & Upwards	1	-	-	1	1	-	-	-
	—	—	—	—	—	—	—	—
	9	8	2	2	4	3	1	1

The Meteorological Report by your Surveyor, Mr. W. Osborne Thorp, and the statistics taken under his supervision, will be found on the last pages of this Report.

I remain, Ladies and Gentlemen,

Your obedient servant,

C. R. P. MITCHELL.

SANITARY INSPECTOR'S OFFICE,
PUBLIC HEALTH DEPARTMENT,
THE COUNCIL HOUSE,
MALVERN,
June, 1936.

**To the Chairman and Members of the Malvern
Urban District Council.**

Ladies and Gentlemen,

I have the honour to present to you my fourth Annual Report as your Sanitary Inspector and Housing Officer, dealing with work carried out during the year 1935.

The coming into operation of new legislation, together with the adoption of a scheme for the inoculation of school children against Diphtheria, plus the already increased duties caused by the Added Area and the Housing Programme, had a revolutionary effect on the Department. The administration of the Shops' Act, 1934, and the Housing Act, 1935, has caused a permanent increase in the work.

The appointment of Mr. R. A. Upstone to the position of an Additional Inspector, and a junior to take his place as Clerk, was made towards the end of March in order to deal with the increased work. Mr. Upstone, however, resigned in October to take up a more remunerative appointment.

In accordance with the requirements of the Ministry of Health and the Home Office, tables giving full particulars of the inspections made, together with notes thereon, will be found in the report.

The total number of inspections and visits was 2,300; full details are shewn on the appended list.

Summary of Visits and Inspections.

Houses Inspected, Public Health Act ...	80
Works in Progress	411
Reinspections	96
Houses Inspected, Housing Act	31
House to House Inspections	57
Works in Progress	185
Reinspections	213
Inspections of Common Lodging Houses	11
,, Factories	14
,, Workshops	19
,, Bakehouses	49
,, Shops	409
,, Restaurant Kitchens ...	2
,, Slaughterhouses	41
,, Butchers' Shops ...	32
,, Stables and Piggeries ...	9
,, Dairies, Cowsheds and Milkshops	175
,, Food Shops	9
,, Fish Friers' Premises ...	5
,, Public House Conveniences	8
,, Public Conveniences ...	4
,, Refuse Tips	2
Special Visits, Advisory Interviews, etc.	223
Visits re Infectious Disease	35
Rat Infestation	64
Smoke Observations	4
Special Visits, Attendance at Clinics re Diphtheria Immunisation	112
Total	2,300

Complaints.

The Register shows that 96 complaints were received during the year under review, these having reference to the following matters:—

Blocked and Defective Drainage ...	18
Defective Closet Accommodation ...	3
Insanitary Conditions of Dwelling-houses	11
Insanitary Roofs, Floors, Windows, etc.	5
Overcrowding	3
Unsatisfactory Water Supplies	2
Smells from Public Sewers	2
Smells from Drains	3
Accumulations of Offensive Matter ...	7
Nuisances from the Keeping of Animals	6
Premises infested with Rats	14
Smoke Nuisances	1
Non-collection of House Refuse ...	5
Verminous Premises	10
Miscellaneous	6

Where a nuisance or defect was found to exist, steps were taken to remove the cause of the complaint by drawing the attention thereto of persons responsible by letter or interview, a procedure which has generally been effective.

Summary of Sanitary Improvements carried out.

Drainage and Sanitary Fittings.

Number of Houses and Premises Re-drained	...	9
Repairs or Amendments to existing Drains	...	11
Drains or Gullies Unstopped or Cleansed	...	9
Length in Yards of Stoneware Drains Laid	...	347
Length in Yards of Heavy Cast-iron Drains Laid	...	284
Manholes Provided	... ..	27
Manholes Repaired	... ..	8
Intercepting Traps Fixed	... ..	5
Fresh Air Inlets Provided or Repaired	... ..	3
New Gully Traps Fixed	... ..	58
Gully Curbs Provided or Repaired	... ..	7
New Soil Pipes and Ventilating Shafts Repaired	...	15
Soil Pipes and Ventilating Shafts Repaired	...	8
Water Tests Applied	... ..	264
Smoke Tests Applied	... ..	93
Air Tests Applied	... ..	11
New W.C. Pedestals Fixed	... ..	34
W.C.'s Unstopped, Cleansed, or Repaired	...	5
Existing Flushing Cisterns Repaired	... ..	23
New Flushing Cisterns Fitted W.C.'s	... ..	19
Joints between W.C.'s and Flush Pipes Repaired	...	6
New W.C. Apartments Provided	... ..	15
New Urinals Provided	... ..	1
Lavatory Basins Provided	... ..	57
Baths Provided	... ..	18
New Impervious Sinks Provided	... ..	5
New Waste Pipes Fixed	... ..	60
Waste Pipes Trapped, Repaired, or Unstopped	...	4
Cesspools and Stagnant Ditches Cleansed	...	4

Miscellaneous.

New Roofs	... ..	1
Roofs Repaired	... ..	9
Eaves Guttering Renewed, Cleansed or Repaired	...	11
Rainwater Pipes Provided, Repaired or Unstopped	...	5
Damp Walls Remedied	... ..	9
Walls Repointed or Repaired	... ..	17
Ventilation under Floors Provided	... ..	3
Yards Paved	... ..	4
Paving of Yards Repaired	... ..	8
Floors of Rooms Relaid	... ..	10
Floors of Rooms Repaired	... ..	13

Rooms Cleansed, Distempered or Repapered	...	93
New Windows Provided	... ..	7
Windows Repaired and/or made to open	... ..	21
New Sash Cords Provided	... ..	38
Window Sills Repaired or Provided	... ..	4
Doors Provided or Repaired	... ..	6
Staircase Repaired	... ..	2
Workrooms (including Bakehouses) Cleansed and Repaired	... ..	9
Water Service Pipes Repaired	... ..	4
Houses Provided with Water Supply from Town's Main	... ..	5
Movable Sanitary Dustbins Provided	... ..	35
Nuisances from Overcrowding Abated	... ..	5
Accumulations of Refuse Removed	... ..	4
Accumulations of Manure Removed	... ..	2
New Ranges and Stoves Provided	... ..	7
Stoves and Ranges Repaired	... ..	3
Food Stores Provided	... ..	4
Washing Coppers Repaired	... ..	7
Verminous Rooms dealt with	... ..	3

Housing.

The Housing Consolidated Regulations, 1925 and 1932, require the Local Authority to make provision for a thorough Inspection to be carried out from time to time of the dwelling-houses in their District. The chief object of the inspections is to ascertain the state of the houses in relation to the following matters:—

- (1) The arrangement for preventing the contamination of the water supply.
- (2) Closet accommodation.
- (3) Drainage.
- (4) The condition of the house in regard to light, the free circulation of air, dampness and cleanliness.
- (5) The paving, drainage and sanitary condition of any yard or outhouses belonging to or occupied with the house.
- (6) The arrangements for the storage of refuse.
- (7) The existence of any room which by virtue of sub-section (1) of Section 18 of the Housing Act, 1925, be a house unfit for human habitation. (This section refers to basement dwellings.)
- (8) Any defects which tend to render the house unfit for human habitation.

Proper records have to be made containing information as to the state of the house, the action taken to secure the remedy of any defects and the result of such action.

The making of systematic house-to-house surveys is a work of considerable importance. It results in many houses being prevented from becoming unfit for human habitation, and enables Local Authorities to enforce a reasonable standard of fitness.

The Housing Act, 1930, which came into operation on the 16th August, 1930, replaces a number of sections in Part I. of the Housing Act of 1925 dealing with the repair, closing and demolition of unfit houses.

The method provided by the Act distinguishes sharply between the houses which can, and those which cannot, be rendered fit at a reasonable expense.

On any report that a house is unfit, the house has to be classified by the Local Authority as being repairable at a reasonable cost, or as being not so repairable.

Section 17 provides that in the former case a person having control of the house (as defined by section 17 (2) shall be required to repair the house (and the Local Authority in his default may do the work and recover the cost from him).

In the latter case this Act provides that the house is to be demolished unless the Local Authority accept an undertaking from the owner, either that the house shall cease to be used for human habitation, or that he will within a specified time carry out such works which will, in the Local Authority's opinion, render it fit.

Section 62 of the Act provides that, in determining whether a house is fit for human habitation, regard is to be had to the extent—if any—to which, by means of disrepair or sanitary defects, it falls short of the standard required by the local bye-laws, or of the general standard of housing accommodation for the working classes in the district.

Sanitary defects are defined in the same section.

57 houses were inspected and recorded under the Regulations during the year 1935. These were situated in Malvern Link.

A figure approaching 150—200 houses inspected would be more desirable for efficiency and proper administration of the Act.

As a result of the inspections made during 1935 the following summary of unsatisfactory conditions has been compiled:—

Uncleanly Conditions	...	...	...	...	13
Dampness	...	...	...	...	18
State of Repair	...	...	...	...	36
Drainage	...	...	...	...	4
Closet Accommodation	...	...	...	...	9
Paving or Sanitary Condition of any Yard or Out- building	...	...	...	...	1
Any defect in other matters which may tend to render the Dwelling-house Dangerous or Injurious to the Inhabitants	...	...	...	...	22
Means for the Disposal of House Refuse	...	...	...	...	51

Houses Unfit for Human Habitation.

Representations were made in respect of 17 individual houses found to be unfit for human habitation and not capable of being rendered fit at a reasonable expense.

Representations were also made in respect of two groups of cottages situated in Happy Valley and a group of cottages situated in Cowleigh Road. These were declared to be Clearance Areas, and the necessary resolutions were made by the Council at their Meeting held on the 1st October.

The Areas referred to being :—

(1) Malvern (Happy Valley) Clearance Area No. 2, 1935, comprising cottage dwellings at Happy Valley known as "Ivy Rock Cottage," "Spring Cottage," and "Laburnum Cottage."

(2) Malvern (Happy Valley) Clearance Area No. 3, 1935, comprising the cottage dwellings at Happy Valley known as "Nos. 1 and 2, Ash Cottages," "Rock Cottage," and "Rock House."

(3) Malvern (Warwick Cottages) Clearance Area No. 4, 1935, comprising the cottage dwellings "Nos. 1, 2, 3 and 4, Warwick Cottages, Old Hollow Road," and "Nos. 97, 99 and 101, Warwick Cottages, Cowleigh Road."

Downs Cottage, Court Road, Malvern, which was scheduled as being unfit, was reconditioned by the owners without the service of formal notices.

The following dwelling-houses were demolished :—

Mill Cottage, Cowleigh Road, North Malvern.

2, 3, 4, Jubilee Cottage, Old Hollow Rd., West Malvern.

1 and 2, Ivy Cottages, Old Hollow Road, West Malvern.

The Hut, Pickersleigh Road, Malvern.

1—9, Peckham Cottages, Poolbrook, Malvern.

The latter mentioned being nine cottages constituting the area on which the Malvern (Peckham Cottages) Clearance Area No. 1, 1933, was made.

Overcrowding in Dwelling Houses.

Housing Act, 1935. This Act came into operation on the 2nd of August. Part I, Sections 1 to 12, deal specifically with the abatement and prevention of overcrowding.

With the object of ascertaining the extent of overcrowding within their districts local authorities are required to cause a survey to be made and a report on the conditions submitted to the Ministry of Health by the 1st April, 1936.

The Act also prescribes a standard, based on room measurements, by which it is intended overcrowding will be prevented.

Information with regard to the permitted number of persons who may occupy a dwelling-house, together with a summary of the obligations placed upon the occupier relative to overcrowding, has to be inserted in rent books by the 1st January, 1937.

A detailed report of the administration of the Act was prepared and submitted to Members of your Council. It was ultimately decided to engage a temporary staff in order to commence the survey in January, 1936.

Though it was anticipated at the outset the percentage of overcrowding in Malvern would be low, the survey involving the measuring of houses should be undertaken in order that information may be supplied to property owners and agents, when required. This is a definite requirement of the Act.

The number of cases of overcrowding abated during the year was 5.

In the selection of tenants from the list of applicants for Council Houses cases of overcrowding are a chief consideration of the Housing Committee.

Common Lodging House.

11 inspections were made at the Common Lodging House which is situated in Belmont Road. It was not found necessary to report any breach of the Byelaws, and it has been perfectly free from Infectious Disease.

Drainage and Sanitation.

During the year under review 9 houses were entirely re-drained, and the drainage systems of 11 houses were partially reconstructed.

For the purpose of keeping records in connection with houses and premises re-drained, plans drawn to scale are prepared, together with a report showing full particulars of the work carried out.

Sanitary Certificates.

No Sanitary Certificates were granted during the year under review, though requests were received. The work required to be undertaken at the houses surveyed was in hand but not completed by the end of the year.

Infectious Disease.

The total number of patients sent to your Isolation Hospital during the year was 41, and the following is a summary of the cases admitted :—

From this District :

Scarlet Fever	...	...	...	...	2
Observation Scarlet Fever	...	...	...	...	6
Diphtheria	...	...	...	...	23
Observation Diphtheria	...	...	...	...	3
Para-typhoid Fever	...	...	...	...	1
					— 35

From Martley Rural District Council :

Scarlet Fever	...	...	...	...	1
Diphtheria	...	...	...	...	5
					— 6

Total 41

One case from within the District and 6 from outside were admitted as paying patients in accordance with the scale of charges made.

The usual steps have been taken for preventing the spread of Infectious Disease, and investigations were made under the direction of your Medical Officer, and disinfection of the homes and clothing of infected persons have been carried out.

Disinfection.

The number of rooms disinfected is 79; 71 loads of bedding, clothing, etc., were removed to your Hospital for disinfection; and 11 lots of bedding, etc., have been destroyed.

Three library books, having been exposed to an infectious disease, were destroyed.

Factory and Workshops' Act, 1901.

The provisions of the Factory and Workshops Act, 1901, which your Council has to administer, chiefly relate to the following matters :—

- (1) (a) Cleanliness.
- (b) Air Space.
- (c) Ventilation.
- (d) Drainage.
- (e) Provisions of Sanitary Conveniences for both sexes.
- (2) The provisions of means of escape in case of fire in Factories and Workshops in which more than 40 people are employed.
- (3) Sanitary Regulations for Bakehouses.
- (4) Homework.

The following table shows the list of Factories, Workshops and Workplaces on the Register :—

Furnishers and Upholsterers	...	...	5
Ironmongers and Tinsmiths	...	...	5
Bakehouses	...	...	22
Dressmakers and Milliners	..	...	8
Tailors	...	...	5
Builders, etc.	...	...	18
Shoemakers and Repairers	...	...	13
Garages	...	...	26
Laundries	...	...	5
Restaurant Kitchens	...	...	3
Various	...	...	24
			134

This list is being corrected, and a new Register is in course of preparation.

The number of inspections made of Factories, Workshops and Workplaces are as follows, the table being in accordance with the requirements of the Home Office :—

PREMISES (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries)	23	Nil	—
Workshops (including Workshop Laundries)	59	2	—
Workplaces (other than Outworkers' premises)	—	—	—
Total	82	2	—

Defects found in Factories, Workshops and Workplaces are as follows :—

Particulars (1)	Number of Defects			No. of Offences in respect to which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
Nuisances under the Public Health Acts :				
Want of Cleanliness ...	5	4	—	—
Want of Ventilation ...	—	—	—	—
Overcrowding ...	—	—	—	—
Want of drainage of floors ...	—	—	—	—
Other nuisances ...	—	—	—	—
Sanitary Accommodation :				
Insufficient ...	1	1	—	—
Unsuitable or defective	1	1	—	—
Not separate for sexes	—	—	—	—
Offences under the Factory and Workshops Acts :				
Illegal occupation of underground bake-house (s.101) ...	—	—	—	—
Other Offences ...	—	—	—	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total	7	6	—	—

Two complaints were received from H.M. Inspector of Factories and Workshops.

Shops Act, 1934.

The provision of the Shops Act, 1934, which your Council are required to administer, relates to the arrangements for Health and Comfort of Shop Workers; these requirements are set out in Sub-Sections (1) and (2) of Section 10 of the Act and deal with provisions relating to ventilation and temperature in shops and to sanitary arrangements.

327 shops were visited and inspected during the year, and a register prepared in order that records may be kept for departmental purposes. In all cases shopkeepers were supplied with a pamphlet containing a summary of the provisions of the new Act.

The following table sets out the number of inspections made, together with a record of action taken :—

Number of Shops inspected and placed on register	327
Number of Shops inspected at which Sanitary Defects were discovered	76

Summary of Sanitary Improvements carried out.

Premises drained or re-drained	6
Repairs and amendments to drains	4
Additional sanitary accommodation provided	1
Sanitary accommodation provided	1
New W.C. pedestals fixed	16
W.C. pedestals cleansed	4
New flushing cisterns to water closets fixed	14
Flushing cisterns repaired	17
Water closets repaired	6

Inspection and Supervision of Food.

(a) MILK SUPPLY.

There are now 27 Cowkeepers on the Register, of whom 19 are also Retailers of Milk. In addition, there are 16 Retail Purveyors of Milk who are not Cowkeepers.

26 Dairymen are on the Register of Retail Purveyors of Milk whose premises are situated outside the Malvern Area.

During the year 175 inspections were made of dairies and cowsheds; early morning visitation to ascertain conditions at the time of milking proved satisfactory.

From time to time joint visits were made by your Medical Officer and Inspector. Requests for cleansing and limewashing of cowsheds and the removal of accumulations of manure from foldyards were made in seven instances.

As a result of representations being made by the Department a notable change is taking place regarding the production of milk; dilapidated cowsheds are being reconditioned and the improved conditions, which include the provision of steam sterilization plants, has a marked effect on the production of clean milk throughout the district, and much is to be said to the credit of those producers who have adopted the modern methods.

The manner in which milk is distributed generally is good, though in a few instances retailers are using motor vehicles which are not properly constructed or adapted for the purpose for which they are being used and are therefore difficult to be kept clean.

It would be of great help if some amendment in the legislation was made on this matter.

THE MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

Grade "A" Milk is now produced at five farms under licences granted by the County Council.

Certified Milk is produced at one farm under licence by the Ministry of Health.

Three Retailers were granted Supplementary Licences under the above Order, two being Grade "A" and the other for Pasteurised Milk.

At the request of the Ministry of Health 33 samples of Certified Milk were obtained and delivered to the County Analyst for Bacteriological Examination.

34 samples of Grade "A" Milk were also taken on behalf of the County Council.

All the samples of milk were found on examination to be satisfactory and complied with the conditions prescribed in the above Order.

(b) MEAT AND OTHER FOODS.

Slaughter Houses.

There are 13 private Slaughter Houses in the District. These are situated in widely different parts of the District, and it is difficult to carry out efficient inspection to see that the Byelaws are complied with.

Systematic meat inspection is absolutely out of the question; it is most disappointing that this important work cannot be undertaken.

Butchers' Shops.

The Butchers' Shops in the District, to which some 32 visits were made, were found to be in a clean and satisfactory condition. Modern refrigerating equipment is practically universal throughout the District.

Slaughter of Animals' Act, 1933.

Under the provisions of this Act 27 Licences were re-issued to slaughtermen and 3 new Licences were granted.

The operation of the Act which relates to the 'stunning of all animals, including sheep, by means of mechanically operated instruments, prior to slaughter in a Slaughter House, was not new to Malvern, as this was enforced under the Council's Byelaws relating to Slaughterhouses.

Unsound Food.

The following articles of diseased or unsound food have been condemned and destroyed as being unfit for human consumption :—

Meat	...	...	...	...	7cwts. 2qrs. 20lbs.
Miscellaneous Tinned Foods:					
Meats,	Fish,	Fruits,			
Vegetables	...			157	tins

Summary of Diseased Meat.

BOVINE TUBERCULOSIS.

Carcase and Organs	...	..	...	1
Heads and Tongues	...	...	...	2
Sets of Lungs	...	...	..	2
Liver	...	...	...	1
Spleens	...	...	...	2
Mesentery	...	...	...	1
Miscellaneous part Carcases	...	...	26	lbs.

Offensive Trades.

The business of Fish Fryer, of which there are four establishments within the District, is the only trade scheduled as an Offensive Trade carried on in Malvern.

There appears to be very little demand for this class of food in Malvern, this is emphasised by the fact that the Fish Fryers' premises are only opened on certain days in the week.

Inspections were made at these premises, which were at all times found to be kept in a satisfactory manner and in accordance with your Bye-laws.

Extension of Urban Boundaries.

To ascertain the sanitary circumstances of the districts taken over as a result of the extension of the Urban boundaries in April, 1932, the Survey involving house-to-house visitation was continued, and during the year reports were made to the Public Health Committee on the conditions prevailing in various parts of the added area.

16 samples of water from wells were submitted to the County Analyst for examination.

The sewerage of the Guarlford area, which your Council have had under consideration, was finally decided. A scheme, prepared by the Surveyor, received the approval of the Ministry of Health. A Local Enquiry on this and sanction for the necessary loan was held at the Council House on 12th November.

It is anticipated that this work will be undertaken during 1936.

Rats and Mice (Destruction) Act, 1919.

64 inspections were made subsequent to complaints of the prevalence of rats, when advice and assistance was given on the destruction and eradication of the rodent. Considerable attention was again paid to the important factor of the rat proofing of the premises.

During the week fixed as National Rat Week by the Ministry of Agriculture and Fisheries, a campaign was carried out on the same lines as in previous years. The following is the text of a report submitted to the Ministry on the operations carried out during National Rat Week, 1935, together with particulars relating to the administration of the above Act by your Council.

During "Rat Week" every endeavour is made to make known the provisions of the Rats and Mice (Destruction) Act, 1919, and the objects of a "National" campaign in the destruction and repression of rats and mice.

Posters are displayed in all parts of the town, and these together with advertisements and articles inserted in local newspapers (copies enclosed) a week previous to Rat Week, form the initial stages of the operations, by calling the attention of the public to the National campaign.

The use of a window space at a vacant shop situated in a main street was secured for the purpose of staging a display, which included an exhibit kindly loaned by the Ministry consisting of show cases, containing specimens of various rodents and some of their natural enemies, together with particulars of effective and safe methods of destruction of rats and mice. The display created much interest and was commented upon in the local Press.

Circular letters, leaflets and Copies of the Bulletin No. 30, issued by the Ministry, were sent to the occupiers of farms, business premises and to the principals of the colleges and schools within the district. Handbills were also distributed.

Publicity in the manner outlined had the dual purpose of enlightening the public of the obligations imposed upon them by the above enactment, and of the facilities offered by the Malvern Council in the way of assistance to owners and occupiers of premises infested or frequented by rats. Preparations of Red Squill in the form of biscuits and Rat Lime may be obtained free, on application at the Public Health Department throughout the year. 40 samples of this preparation were given to persons making this request during Rat Week.

During the period commencing the 4th to the 28th November, the number of requests for free samples of this rat poison was 72. Only a small percentage of this number, however, can be regarded as complaints of rat infestation, as subsequent enquiries revealed that in only six instances rats were found to be prevalent at premises in the occupation of persons making the request. The conclusive reason for the majority of requests being that a sample of rat poison was considered useful, as evidence of rats had been noticed at some time or other.

In order that complaints could be thoroughly investigated the services of a rat catcher was engaged, and visits to some 105 privately occupied lands and premises, public refuse tips and other public works were made. Rats were discovered and caught in 10 instances. The only serious case of infestation being at some piggeries situated amongst a group of small-holdings, where 62 rats were caught. In addition to hunting with dogs and ferrets, where circumstances would permit, traps and poison baits of the above-mentioned preparation were laid.

During the past three years complaints received from time to time by the Health Department, respecting Rat Infestation, have been systematically dealt with, and the action taken is greatly appreciated by the public. It can be claimed that this work outlined in the foregoing paragraph—which is carried out by a Council employee working under the direction of the Sanitary Inspector—is responsible for a reduction in the number of premises being infested with rats and mice.

Legal Proceedings.

It was not necessary to institute any legal proceedings during the year.

Staff.

Mr. R. A. Upstone terminated his appointment of Additional Sanitary Inspector in October, to take up the post of Additional Sanitary Inspector and Building Surveyor under the Rural District Council of Ringwood and Fordingbridge.

Mr. R. E. Williams, of Wolverhampton, was appointed to fill the vacancy, and arrangements were made for him to take up his duties on the 1st January, 1936.

Conclusion.

I am again indebted to Dr. Mitchell for his kind co-operation and invaluable help so freely given. This I gratefully acknowledge.

I wish to express my appreciation to the staff for their keen interest in the work of the Department and their readiness to undertake duties after usual office hours.

My thanks are also due to the Chairman and Members of the Public Health Committee for their support and consideration during the year.

I am, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

HUGH L. WHITWHAM.

MALVERN METEOROLOGICAL REPORT, 1935.

The weather of the year was very variable, the most notable feature being the sharp frosts on the 17th and 18th of May, though Malvern escaped the heavy snowfall reported from many places. An unusual warm period was recorded during the last ten days in June; followed by a hot, dry July, with scarcely any rainfall, which conditions continued till the 28th August; followed by a wet September, with strong winds during the middle of the month. October was wet, with a gale on the 19th. December was dry till the 24th, when rain set in to the end of the month, accompanied by mild, warm weather, following a cold spell lasting twelve days from the 13th. The Monthly Summary for the year was :—

JANUARY. Very dry, rainfall being 60 per cent. below average; sunshine normal; temperature 2 degrees above normal. The barometer reached a record height of 1,042 millibars on the 20th.

FEBRUARY. Very mild, with rainfall 5 per cent. above average, sunshine about 12 per cent. below normal, and temperature 4 degrees above the average, a maximum of 57 degrees being recorded on the 16th; gale on the 16th.

MARCH. The month was very dry, being 60 per cent. below the normal rainfall, whilst sunshine was 22 per cent. above the average. Temperature was also 2 degrees above average, the period from the 18th onwards being exceedingly mild, reaching 62 degrees on the 20th.

APRIL. This month, by contrast, was wet and mild, the rainfall being rather more than double the normal. Sunshine, however, was just normal, and the temperature 1 degree above.

MAY. Very dry and sunny, rainfall being only one-third of the average, with sunshine 10 per cent. above average. The exceptional frost did great damage on the 17th and 18th; the average temperature for the month was in consequence 3 degrees below normal.

JUNE. The early part was wet, and a sharp thunderstorm on the 25th accounted for over an inch of rain, rainfall being rather more than double the usual average. Sunshine was about 8 per cent. below normal and temperature nearly 3 degrees above, the latter half being unusually hot, 86 degrees on the 23rd being the highest recorded here for this month.

JULY. The month was unusually dry and exceptionally sunny. Rainfall was negligible, and the driest July so far recorded, whilst sunshine was about 24 per cent. above normal, and the sunniest July yet recorded. Temperature was as much as $4\frac{1}{2}$ degrees in excess of the average, 89 degrees being reached on the 13th, the hottest July day since 1923.

AUGUST was warm and dry till the last week, when wet conditions set in. Rainfall was about 30 per cent. below average—a drought period of 19 days being recorded up to August 8th—and sunshine nearly 20 per cent. above. The temperature was $3\frac{1}{2}$ degrees above normal, 84 degrees being recorded on the 6th, 7th and 8th.

SEPTEMBER. This month, in contrast to the previous ones, was wet—the rainfall just over double the normal. Sunshine, however, was about the average, and temperature 1 degree above normal. Thunderstorms occurred on the 4th, 14th, 22nd and 24th, that on the 22nd being accompanied by exceptionally heavy rain and hail, over an inch falling in about half an hour.

OCTOBER. Rainfall was about 12 per cent. above normal, and sunshine slightly below, whilst temperature was normal. Strong winds, gale at times, were recorded on the 19th, 20th, 27th and 29th.

NOVEMBER was exceptionally wet, rainfall being 70 per cent. above normal, but sunshine was about 12 per cent. above and temperature 1 degree above. Over an inch of rain fell on the night of the 14th.

DECEMBER. Weather was fairly dry till Christmas, the remainder of the month being very wet, the rainfall being about 30 per cent. above the average, sunshine 20 per cent. above, and temperature over 2 degrees below normal, due to the severe cold between the 17th and 23rd, when 15 degrees of frost was recorded on the 23rd, which was followed by very mild weather to the end of the year.

Humidity at 9 a.m. averaged 75 per cent. Thunderstorms occurred on two days in June (that on the 25th with heavy rain), once in August, and on four days in September (with heavy rain on the 21st). There was very little snow recorded. Barometric pressure over the year as recorded was below the average.

WIND SUMMARY.

(5 Winter months and 7 Summer months.)

	<i>Winter</i>	<i>Summer</i>		<i>Winter</i>	<i>Summer</i>
N.N.W.	2 days	7 days	E.N.E.	4 days	1 days
N.	14 „	15 „	E.	2 „	1 „
N.N.E.	5 „	5 „	E.S.E.	0 „	2 „
N.E.	9 „	18 „	S.E.	3 „	12 „
	30 days	45 days		9 days	16 days
S.S.E.	5 days	11 days	W.S.W.	8 days	16 days
S.	9 „	19 „	W.	11 „	18 „
S.S.W.	8 „	14 „	W.N.W.	12 „	17 „
S.W.	10 „	18 „	N.W.	22 „	32 „
	32 days	62 days		53 days	83 days
	Total Wind days			330	
	Total Calm days			35	
				365	

Weather Summary of 9 a.m. Records.

1935 MONTH.	Av. Corrected Barometric Pressure Millibars.	TEMPERATURE.						Rainfall in M/M	No. of Wet Days.			Humidity of Atmos. per cent.	Earth Temperature		Wettest Day M/M	Bright Sunshine Hours.
		Daily Average.		Monthly Mean Temp. Degrees	Average Daily Variation Fahr.	0.2 M/M. or over.	1.0 M/M or over.		1ft. depth	4ft. depth						
		Max. Degrees	Min. Fahr.													
January	1026.9	44.3	38.4	41.4	5.9	11	5	19.8	81	42.4	45.1	5.1 on 25th	60.7			
February	1008.0	47.9	39.0	43.5	8.9	14	12	49.4	78	41.6	43.6	9.5 on 24th	58.6			
March	1023.0	50.8	38.6	44.7	12.2	9	4	20.1	77	42.5	43.5	9.0 on 5th	136.0			
April	1009.8	54.5	41.0	47.8	13.5	18	16	112.9	69	48.3	47.1	17.8 on 15th	159.5			
May	1019.8	58.6	42.2	50.4	16.4	10	5	17.0	69	52.6	50.6	3.4 on 20th	209.9			
June	1011.2	67.8	53.0	60.4	14.8	19	14	94.9	71	59.9	54.8	26.7 on 25th	195.0			
July	1016.8	73.9	57.3	65.6	16.6	4	3	9.5	65	66.7	61.4	4.3 on 19th	268.4			
August	1015.4	72.7	55.4	64.1	17.3	11	6	48.2	71	65.7	63.0	10.9 on 30th	207.0			
September	1010.7	64.2	51.0	57.6	13.2	21	19	107.5	76	58.8	60.0	25.9 on 21st	146.9			
October	1009.3	55.1	45.0	50.1	10.1	18	12	84.9	79	51.3	54.8	18.4 on 9th	98.2			
November	1004.9	49.0	40.1	44.6	8.9	22	17	152.5	87	44.9	49.5	27.9 on 14th	61.2			
December	1003.3	41.8	34.4	38.1	7.4	21	15	97.8	81	38.0	43.7	18.8 on 27th	65.5			
TOTAL Monthly Average	— 1013.2	— 56.7	— 44.6	— 50.7	— 12.1	178 —	128 —	814.5 (= 32.0 inches)	— 75	— 51.1	— 51.4	— —	1666.9*			

* 40.6 per cent. of total possible sunshine (4,105 hours).



